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### OF

# DIET AND REGIMEN

FOR

## DYSPEPTICS, VALETUDINARIANS,

AND

## CONVALESCENTS;

# for persons suffering disorders of the Stamach, Liber, or Bowels;

AND FOR

THE AFFECTIONS OF OTHER ORGANS AND PARTS THAT THESE DISORDERS ORIGINATE.

#### BY

## JAMES COPLAND, M.D. F.R.S.

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; VICE-PRESIDENT OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; LECTURER ON THE PRINCIPLES AND PRACTICE OF MEDICINE AT THE MIDDLESEX HOSPITAL; CONSULTING PHYSICIAN TO QUEEN CHARLOTTE'S LYING-IN HOSPITAL; CONSULTING, AND LATE SENIOR PHYSICIAN TO THE ROYAL INFIRMARY FOR THE DISEASES OF CHILDREN, AND FORMERLY SENIOR PHYSICIAN TO THE SOUTH LONDON DISPENSARY.

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# NOTICE.

'THE following concise observations on, and directions as to, "diet and regimen," are taken from the author's large work on *Practical Medicine*.

As these observations and directions apply to very many diseases, — to valetudinarians, to the debilitated, and to convalescents from acute maladies, — to the great majority of persons who consult a physician at his own residence, the author has taken this mode of placing them in the hands of those who thus request his advice; whatever there may be that especially requires adoption or avoidance, appropriately to individual cases, being pointed out and explained during consult= ation.

5. Old Burlington Street.



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# DIET AND REGIMEN,

ETC.

INTRODUCTORY REMARKS ON INDIGESTION.

1. THE functions of digestion are weakened not only primarily, but also consecutively upon, and concomitantly with, the great majority of the affections to which the human organs are liable. Indigestion is thus simple and primary, associated or complicated, consecutive and symptomatic. In whatever form or mode of association it presents itself - with whatever disorder, acute disease, or chronic affection, it may be allied, it requires the closest attention, not merely in respect of itself, but also as'regards the disorder with which it is complicated, and of which it is very often the more immediate and efficient cause. Besides, all disorders of the organs of digestion, of assimilation, and of excretion,-all diseases of the viscera concerned in respiration and circulation, - all the maladies implicating sensation, motion, volition, and intellection — require strict attention to diet and regimen, in aid of medieal treatment — the utmost care in the selection of substances, suited to the weakened and disordered functions, by which they are to be digested and assimilated; and which will be further disordered whenever the articles of diet are inappropriate, or excessive as to their quantity, or as to the frequency of their ingestion, or as to their number or variety.

2. In all the disorders just alluded to - in all persons labouring under chronic or prolonged disorders of the stomach, liver, bowels, or of any of the organs seated in the abdomen, or in the chest, or in the brain or spine --- in those sub-ject to gout, to urinary or calculous complaints, or to eruptions on the skin, the following conditions of the digestive organs are generally present; some one or other of them being, however, more prominently marked : - 1. Impaired organic nervous power of the stomach. 2. A deficient or disordered state of the gastric juice, or a want. of a due relation between the quantity and nature of this fluid and the ingesta. 3. Impaired absorbing power of the stomach, rendering the digestion of the fluid ingesta more or less difficult, and weakening the gastric fluid. 4. Diminished muscular energy of the stomach ; the motions and tonio

vermicular actions of the organ being weakened, and the admixture of the gastric juice with the ingesta being thereby impeded or delayed.\* These

\* The first requisite to digestion is an adequate supply of gastric juice, and its thorough admixture with every particle of the food on which it is to operate. The second is a steady temperature of about 98° or 100° Fahr. The third is the gentle and continued agitation of the alimentary mass in the stomach during the digestive process. ---The gastric juice does not continue to be secreted between the intervals of digestion, and does not accumulate, to be ready for acting upon the next meal. In health, the gastric secretion always bears a direct relation to the quantity of aliment naturally required by the system ; so that if more than this be taken, there will be too small a supply of the juice for the digestion of the whole. The gastric secretion and the villous coat of the stomach undergo great changes during disease. Whenever a feverish state is induced by obstructed perspiration, or by stimulating liquors, or by overloading the stomach; and when influenced by fear, anger, or other emotions, depressing or disturbing the nervous system, the villous coat becomes sometimes red and dry, and at others, pale and moist, having lost its smooth and healthy appearance. As a necessary consequence, the secretions become vitiated, impaired, or suppressed; and the follicles, secreting the mucus which protects the surface of the villous coat, become flaccid, and no longer yield this bland secretion. The nervous and vascular papillæ, thus deprived of their defensive shield, are then subjected to undue irritation. When these diseased states are consider-, able, the system sympathises, and dryness of the mouth, thirst, quickened pulse, &c., show themselves; and no gastric juice is secreted, even on the application of the usual stimulus of food. The dry, irritated condition of the

pathological conditions may be *primary*, or they may be *consecutive* upon disease of the brain, of

villous coat, and the absence of the healthy gastric secretion in the febrile state, not only explain at once the want of appetite, nausea, and uneasiness generally felt in the region of the stomach; but also show the folly of attempting to sustain strength by eating when the food cannot be digested, and when nature instinctively refuses to receive it.

*The inferences* that may be conclusively drawn from experiment and observation are the following : —

1. That the processes of mastication, insalivation, and deglutition are important, not merely as subjecting the food to the gastric juice in a state of due preparation for its action, but also as allowing time for the regular contraction of the stomach upon each individual morsel conveyed into it, as well as transmitting the food in small portions at a time, so as to prevent a too rapid or excessive, and injurious distention of the organ. —

2. That the gastric juice is the agent of chymifaction; that it is secreted from vessels distinct from the mucous follicles; that it is a clear transparent fluid, without odour, a little salt, and perceptibly acid; and that it contains free hydrochloric acid, a little acetic acid, and some other active chemical principles.—

3. That this juice is never found free in the stomach, but is always excited to discharge itself by food or other irritants; that it is seldom obtained pure, but generally mixed with mucus, and sometimes with saliva; and that, when pure, it is capable of being kept for months, or even years. —

4. That it is a solvent of food, and alters its properties; that it checks the progress of putrefaction, corrects putrid substances, coagulates albumen and milk, and afterwards dissolves the coagula; and that it commences its action on food as soon as it comes iu contact with it. —

the liver, of the intestines, of the heart, of the kidneys, or of any other organ; or they may be

5. That the gastric juice is capable of combining with a certain fixed *quantity* of food; and when more is presented for its action than it will dissolve, indigestion will ensue; and that its action is facilitated by the warmth and motions of the stomach, these motions taking place chiefly in two directions, transversely and longitudinally. —

6. That the gastric juice is modified in quantity and probably in its intimate constitution, so as to suit the kind of food; and hence the occurrence of indigestion on sudden alterations of the kinds, quality, and quantity of food.

7. That the action of the stomach and of its fluids is the same on all kinds of diet: and that the motions of the stomach produce a constant admixture of food and gastric juice, and thereby facilitate digestion. —

8. That *solid* food, of a certain texture, is easier of digestion than *fluid*; that *animal* and *farinaccous* aliments are more digestible than *vegetable*; but that susceptibility of digestion does not depend altogether upon natural or chemical distinctions. —

9. That digestion is facilitated by *minuteness of divi*sion and *tenderness of fibre*, and retarded by opposite qualities.—

10. That the ultimate principles of aliment are always the same, from whatever food they may be obtained. —

11. That chyme is homogeneous, but variable in its colour and consistence; and that, towards the latter stages of chymification, it becomes more acid and stimulating, and passes more rapidly from the stomach. —

12. That soups and other liquid food do not call into play the muscular coat of the stomach; and before the gastric juice can act upon them, the fluid part must be absorbed, and the mass thickened to a proper consistence part only of some more general malady. Indigestion may thus be *idiopathic* or symptomatic. As

for undergoing the usual churning motion; and, consequently, that this kind of food often gives rise to aeidity, particularly in weak states of the stomach.—

13. That, owing to the adaptation of the gastric juice to the nature of the food, sudden or extreme changes from one kind of diet to another are injurious; for the stomach has not had time to modify its secretions sufficiently to meet the altered demand upon its powers.—

14. That water, ardent spirits, and most other fluids, are not affected by the gastrie juice, but pass from the stomach soon after they have been received; that heating condiments are injurious to the healthy stomach; and that the use of spirits always causes disease of this organ and of the associated viscera, if persevered in.—

15. That bulk, as well as nutriment, is necessary to articles of diet; and that digestibility does not depend upon the quantity of nutrient principles that aliments contain.—

16. That the quantity of food generally taken is more than the wants of the system require; and that such excess, if persevered in, generally produces functional disorder, and, consecutively, organic disease. —

17. That oily food is difficult of digestion, though it contains a large proportion of nutrient principles.

18. That *bilc* is not usually found in the stomach, and is not necessary for the digestion of food; but that, when oily food is used, it assists digestion.—

19. That gentle exercise facilitates digestion; and that the *acetic*, *citric*, and *hydrochloric* acids promote this process, particularly if vegetables and indigestible substances have been taken.—

20. That the time required for the stomachic digestion depends upon the quantity and kind of food, and upon

presented to the physician in practice, it is generally owing to the above specific conditions, in connection with the following: — 1. Deficiency, as to quality and quantity, of the fluids derived from the liver, pancreas, and intestinal mucous membrane. 2. Disorder of the circulation and functions of this membrane; and 3. Disorder of the consecutive and harmonious actions of the muscular coat of the small and large intestines.

the state of the stomach; that the time required for the disposal of a moderate meal, in a healthy state of the organ, varies from three hours to three hours and a half or four hours; and that in states of indigestion, the process is delayed much longer than this, particularly as respects the more indigestible substances. —

21. That a diminution of the temperature of the stomach below  $98^{\circ}$  impedes digestion ; and that the temperature of the organ is not necessarily elevated by the process. —

22. That whatever promotes organic nervous power, without exhausting it, favours digestion, as breathing a dry pure air, hilarity of mind, moderate laughter, &c. i. Of food and drink with reference to disorders of the assimilating and excreting functions, and to the consequences of these disorders.

3. Unless the diet of persons suffering disorders of the digestive organs, or any of the more immediate and remote consequences of these disorders, be duly regulated, — whether these consequences be slight and prolonged, or severe and acute, medical means will be employed in vain.

4. In considering diet with reference to these disorders and affections, there are various matters requiring particular notice: -1. Of food, with reference to the temperament of body and habits of life; 2. The kinds and qualities of food; 3. The quantity and congruity of food with reference to disorders of the digestive organs and their consequences; 4. The times of eating, or the periods which should intervene between meals; 5. The kind and quantity of drinks; and 6. The conditions deserving notice in connection with eating and drinking.

## A. Of Food with reference to Temperament of Body and Habits of Life.

5. A direct relation ought always to subsist between the qualities of the food and the nature of the constitution which it is intended to support. The highly concentrated and stimulating food necessary for the support of those who take very active exercise will prove too exciting to the irritable constitution of persons possessed of great activity of the brain and nervous system; and the generous diet, which suffices to rouse or support a phlegmatic system, will prove too nutritive for a person of a florid and sanguine temperament. For persons of a florid complexion, with great activity of the circulation, and a consequent liability to inflammatory diseases, the food ought to be calculated to soothe rather than to stimulate. Red meat, spices, wines, and fermented liquors, ought to be used sparingly, and the principal support derived from soups, fish, mucilaginous vegetables, acidulous fruits, and diluting drinks. In lymphatic persons, on the other hand, where the circulation is weak and slow, and the functions feeble, benefit is derived from a larger proportion of animal food, while OF DIET IN

vegetables, soups, and fluids, prove relaxing. To these persons, wine in moderation and spices are useful, if much exercise be taken. Persons of a highly nervous temperament, of great excitability and sensibility to impressions, are injured by heating or stimulating diet. White meats, as fowl and fish, farinaeeous and mucilaginous aliments, and ripe fruits, are most appropriate to them. Where the bilious temperament predominates, and much active exercise is taken in the open air, a full supply of animal food is necessary, and a moderate allowanee of wine or other stimulus is borne with less detriment, if not with more advantage, than in the sanguine and nervous temperaments. Where the constitution is of a mixed nature, a diet composed of animal and vegetable substances in nearly equal proportions is, under ordinary eireumstanees, the best.-The food, also, should be adapted to the age, state of health, and mode of life of the individual, and to the elimate and season of the year. A diet which would be quite sufficient to a person of sedentary occupations, would be inadequate to support an individual subjected to frequent or constant exertion. In warm climates and seasons, moreover, a smaller supply of food, particularly of a heating

14

or stimulating kind, is necessary, than in cold and temperate countries. In the former but little animal food is requisite; in the latter, especially in very cold regions and in rigorous seasons, an abundant supply of this kind of diet becomes indispensable.

B. Of the Kinds and Quality of Food with reference to Disorders of the Assimilating Functions and to their Consequences.

6. a. Although there are few articles of diet which a healthy person, leading a sufficiently active life, may not eat with impunity, there are many which ought to be preferred, and others which should be avoided, by dyspeptics, invalids, and convalescents. *Vegetables* are slower of digestion than animal and farinaceous aliments, and more liable to undergo the acetous fermentation in weak stomachs, and to occasion acidity and flatulence. Fat and oily meats are also very indigestible, and give rise to acid or rancid eructations and heartburn. Soups and liquid food are acted upon by the stomach with great difficulty; and, if the diet consist chiefly of them, they furnish insufficient nourishment, and never fail of producing the more severe forms of dyspepsia, and the diseases of debility. Soups are hurtful when taken at the commencement of a full meal; but when little or no animal food is eaten along with them, and rice or bread is taken with them, so as to promote their consistency, they are digested with greater ease. Pastry, heavy puddings, pies, rich cakes, and articles containing fatty or oily matter, are the most indigestible of all kinds of food. Plain well-cooked animal food, particularly venison, mutton, and game, kept a due time before it is cooked, and eaten in moderate quantity, with stale bread, or with roasted, mashed, or dry mealy potatoes, or with rice, is one of the most digestible meals that can be taken by the dyspeptic. The kind, however, of animal food, and the modes of dressing it, should depend much upon the state of disorder, and the age and constitution of the patient.

7. In all disorders of the digestive and excreting organs, — by persons subject to cutaneous eruptions, to gout, to calculi, gravel, and diseases of the urinary organs, — and during convalescence from severe or acute diseases, pork, ham, bacon, sausages, veal, goose, duck, rich sauces, pies, articles cooked a second time, pastry, heavy puddings, rich cakes, fat or oily articles, and all those enumerated hereafter (§ 23.), ought to be entirely avoided. The substances with which certain of these and other articles are sometimes stuffed for table are even still more injurious than they are.

8. b. Fish holds an intermediate rank between the flesh of warm-blooded animals and vegetable food, as respects digestibility. It is less nutritious than mutton or beef; and a larger quantity is requisite to satisfy the appetite. Whiting, haddock, and skate, are the most digestible of saltwater, and perch of fresh-water fish. Cod, soles, gurnard, and turbot, are successively richer and heavier, but easier of digestion than mackerel. herrings, eels, or salmon. Eels are, however, more digestible when they are stewed. Salmon is very indigestible, as frequently obtained from the London fishmongers, but it is not indigestible when quite fresh and properly cooked. The same observation applies to mackerel and herrings. Fish is most digestible when boiled; it is less so when broiled; and the least so when fried. The dyspeptic should eat it dressed only in the first of these ways. Shell-fish is slow of digestion; some much more than others. Raw

oysters are more digestible than crabs or lobsters ; but oysters, when stewed or otherwise eooked, are heavier than either. Fish is often rendered indigestible by the sauces, &c. taken with it. Vinegar, however, and lemon-juice promote the digestion of it. Malt liquor ought not to be drank with fish. Fruit should not be eaten after it; and milk, likewise, should be avoided.

9. The more indigestible kinds of fish, and the less wholesome modes of eooking it just speeified, should not be ventured upon by dyspepties, or by persons affected by, or subject to, any of the disorders above mentioned (§ 7.), or to any of their consequences. Persons subject to eutaneous eruptions ought never to partake of fish, and more especially of shell-fish.

# C. Of the Quantity, Congruity, and Variety of Food.

10. a. The quantity of food should always be proportioned to the digestive powers of the stomach and the wants of the system. Where waste is great, and growth active, an abundant supply of food is requisite, and the desire for it is commensurate with the demand. Those who lead sedentary lives, and whose circumstances admit of free living, are peculiarly liable to dyspeptic complaints, owing chiefly to the quantity of food in dulged in. It is indispensable to a due and natural supply of aliment to the stomach, that attention be paid to the preliminary processes of mastication and deglutition. If these be performed too hastily, too much food will be received in a short time, in a state of insufficient preparation, and the stomach will be overloaded, before the sensation of hunger can be completely allayed. As the dilatation of the stomach by the ingesta should be gradual, and ought not to exceed a certain limit, and as a definite quantity of gastric juice is secreted, according to the wants of the system and the habits of the individual, if more than the usual quantity of food be taken, the organ will be over-distended and a part of it will remain undissolved, producing the usual symptoms of indi-Such being the case even with the gestion. healthy, how much greater will be the disorder when excesses are committed by dyspeptics, and persons subject to the complaints above specified. Sir F. HEAD very justly remarks, " that almost every malady to which the human frame is liable is, either by high-ways or by-ways, connected with

the stomach; and I must own, I never see a fashionable physician mysteriously counting the pulse of a plethoric patient, or, with a silver spoon on his tongue, importantly looking down his red inflamed gullet, but 1 fccl a desire to exclaim ' Why not tell the poor gentleman at once-Sir, you've eaten too much, you've drunk too much. and you've not taken exercise enough !'"-Dr. ABERCROMBIE truly observes, " When we consider the manner in which diet is generally conducted in regard to the quantity and variety of food and drink, instead of being astonished at the prevalence of indigestion, the wonder should be that any stomach, having such duties imposed on it, is capable of digesting at all." Much, certainly, is to be done in dyspepsia, by attention to the quality of the articles of food, but much more depends upon the quantity. Indeed the dyspeptie might almost be independent of attention to the former, if he rigidly observed the latter. This opinion is supported by experiments showing that the power of digestion is limited by the amount of gastric juice provided by the stomach - an amount varying with the modes of life and the wants of the system. It is superfluous to remark that second courses, served up to gratify the pride of the

host, overcome the stomach, paralyse digestion, occasion acute attacks of indigestion, and induce or aggravate the slighter states of the disorders already enumerated.

11. It is impossible to assign any rules respecting the quantity of food that should be taken, as it depends upon so many circumstances. Mixtures of different kinds of food are injurious to digestion, chiefly by the inducement to excess in quantity, which the variety affords, and by the incongruity of many of the articles. When only one dish is partaken of, there is less temptation to exceed the due quantity, than when several are tried. The first intimations of a satisfied appetite, are warnings to stop eating, which should never be neglected by dyspeptics. If these be passed by, indigestion or an aggravation of it, where it is already present, will always result. The quantity of food should also have reference to the amount of exercise. When little or no waste is excited by exercise, the supply should be remarkably moderate, as well as digestible. Persons who have removed from the country, where they have enjoyed active exercise in the open air, and have consequently digested well a full diet generally become dyspeptic when they have removed to large towns, and are subjected to very different eireumstances, especially if they continue the same quantity of food, or if they inerease it.

12. b. Persons who are subject to disorders of the organs eoneerned in digestion, or to any of their consequences, and more particularly those already suffering from them, and all who are liable to gout, to affections of the urinary organs, to diseases of the brain, and to eruptions on the skin, should be very moderate in the use of animal food. In the great majority of persons who are either predisposed to, er actually afflicted with, these complaints, the appetite is much greater than the powers of digestion, assimilation, and exerction. The appetite should never be made by them the guide to the quantity of food ; and they ought never to partake of animal food oftener than once in the day, and then in very moderate quantity, the exact amount being regulated according to the circumstances of individual eases. In many instances, it will prove advantageous to allow one, two, or even three days in the week to pass without taking any animal food, more especially of the more nutritious and stimulating kinds; a farinaceous diet being adopted in its stead. Several of the

aliments, out of which many of these complaint<sub>s</sub> are generated, will thus be withdrawn; and whils the supply of those materials by which disorder is produced, nourished, and perpetuated, is thereby, in a great measure, cut off, the morbid effects which have already resulted, will be more easily, and more successfully, attacked by medicine.

13. c. The congruity of all the articles about to be partaken of should be duly considered, during any of the disorders already mentioned. Amongst a great variety, some will prove incongruous and unsuitable to the state of the stomach and its allied organs, in many cases. To avoid a variety of articles therefore, and to select one or two which are digestible, or appropriate to the existing condition of the patient, should be adopted as an invariable rule.

## D. Of the Times of Eating.

14. In general, five or six hours should elapse between one meal and another. Even in healthy persons, digestion of a full meal is seldom over n less than four hours; and in dyspeptics, it is seldom disposed of until a much longer

period has passed. The stomach, also, requires an interval of rest after the process is finished, in order to enable it to enter upon the vigorous digestion of the next meal. If food be taken before the organ has recovered itself from its previous exertion, the secretion of the gastric juices, and the muscular contractions, will be imperfect. The whole of the gastric juice which the stomach can secretc in a given time being engaged in the digestion of the first meal, the one taken too closely upon it will be insufficiently acted upon, and thereby undergo fermentation. The intervals between meals should be in relation to the quantity eaten, and the habits of the individual as to air and exercise. When the latter are enjoyed, the periods may be much shorter than when the habits arc sedentary. Persons suffering any of the complaints alluded to, and invalids, who partake only of one or two articles at a meal, and of those in very moderate or small quantity, may allow, with advantage, a shorter time than the above to elapse between meals; but the exact time should be regulated by the physician, according to the complaint, and to the articles of food usually taken.

15. For dyspeptics, as well as for healthy

24

persons, the meals should be regulated according to the necessary occupations and habits For those, who work by of the individual. day and sleep by night, an early breakfast, an early dinner, and an early evening meal, will be most conducive to health. But for those who, against the laws of nature, keep late hours, late breakfasts and dinners are preferable .- Persons who eat suppers ought not to breakfast till one or two hours after rising; but those who dine late and eat nothing afterwards, require breakfast sooner. As a general rule, breakfast about half . an hour or an hour after rising will be found most beneficial. Those who are obliged to rise very early, should take a cup of coffee or tea with a biscuit soon after getting up, and a more substantial breakfast about three hours afterwards. If exposure to cold, to the morning dews, or to unwholesome air, or to any other cause of infection be incurred in the morning, the stomach should be fortified by coffee or by breakfast. The dyspeptic, especially, ought never to travel, or to enter upon any exertion with an empty stomach, and never with an overloaded one.

16. In general, not more than five or six hours should elapse from breakfast till dinner.

For youths and eonvaleseents, and for persons taking active exercise in the open air, the interval may be somewhat shortened; but for sedentary persons, it may be much prolonged. Much, however, should depend upon the appetite, which ought to have returned some time before dinner is taken. According to this, the most suitable time for this meal is about two o'clock. As many dyspepties as well as others cannot dine until much later in the day, ought nothing to be taken till five, six, or seven o'eloek? or ought a light repast to be taken at one or two o'clock, and the appetite be chiefly reserved for a substantial meal at a much later hour? When dinner eannot be taken until eight or nine hours after breakfast, it will be necessary to have some refreshment in the meantime; but it should be in relation to the time that will elapse until dinner, and to the exercise taken. For persons of sedentary habits, a biscuit and a glass' of water will be sufficient; but for the active and the young, especially if the interval be long, a more substantial luncheon is necessary. The habit of resorting to pastry-eooks for refreshment, and of taking wine with it, is generally prejudicial, and particularly in dyspepsia. When dinner cannot be taken until a late hour, it should always be

 $\mathbf{26}$ 

postponed for half an hour or an hour, until excitement or fatigue has subsided.

17. When the dinner is early-from 1 to 3 o'clock -a light evening meal of tea or coffee and bread is necessary; but when the dinner is late, or little exercise is taken after it, tea or coffee should be used merely as a diluent, and no food ought to be eaten. After an early dinner, admitting of time for its digestion and a return of the appetite before a late hour, a third meal, of light aliments, and in moderate quantity, should be taken, particularly by persons engaged in the open air. When ultratemperance is practised by the dyspeptic, particularly when he lives actively, and retires to bed with an entirely empty stomach, he is quite as likely to have disturbed sleep and unpleasant dreams, as if he had his stomach loaded. He may even be wakeful and irritable, or experience a sense of unpleasant emptiness or gnawing at the stomach. All these may be removed by a basin of arrowroot or sago, or by some boiled rice, or rice and milk, about an hour before bedtime. A light supper may therefore be taken, when the dinner is early; but it should be at least an hour or two before retiring to rest.

#### OF DRINKS

# E. Of Drinks in Dyspeptic and other Disorders, &c.

18. The dyspeptie, as well as other valetudinarians, inquire, What ought we to drink? but they rarely follow the question by the next important one, When should we drink? And they never inquire as to the temperature at which fluids should be taken .- Respecting the first of these questions, it may be stated, that water - either spring water, or toast-water, is the safest if it be taken only according to the dictates of thirst. Whey, fresh small beer, soda water, and seltzer water, are of service in many cases, as will be notieed hercafter; but fermented liquors and wines require much greater restrictions. The young dyspeptie or invalid ought never to drink any thing but water, toast-water, or whey. The more stimulating beverages will be prejudicial to him, unless during states of debility, for which it may be necessary to prescribe them medicinally. Of all these, spirituous liquors are the most injurious, and ought never to be taken in any form, nor in any variety of indigestion or disorder. Some of the asthenie states of disease, which are benefited by a moderate use of wine, arc exasperated by spirits, or even

by malt liquors. Dr. BEAUMONT observed, in ST. MARTIN's stomach, after a free indulgence in ardent spirits for several days, the villous surface covered with inflamed and aphthous patches, the secretions vitiated, and the gastric juice diminished in quantity, viscid, and unhealthy, although he complained of nothing, not even of impaired appetite. Two days later, when matters were aggravated, the inflamed appearance was more extensive, the spots more livid, and from the surface of some of them, small drops of grumous blood exuded. The aphthous patches were larger and more numerous, the mucous covering thicker than usual, and the gastric secretions much more vitiated. The fluids, extracted from the organ, were mixed with much thicker ropy mucus and muco-purulent discharges, slightly tinged with blood. Yet ST. MARTIN complained only of an uneasy sensation, and a tenderness at the pit of the stomach, with vertigo and dimness of vision on stooping. The tongue was covered with a yellowish brown coating, and the countenance was somewhat sallow. After a few days of low diet with mild diluents, the inner surface of the stomach assumed its healthy state, the gastric juice bccame clear and abundant, the secretions natural,

and the appetite voracious. Dr. BEAUMONT adds, that the free use of ardent spirits, wine, beer, or any intoxicating liquor, when continued for some days, invariably produced these morbid states. Eating voraciously or to excess, and swallowing food imperfectly masticated, or too fast, produced the same effects when repeated frequently in close succession. (Exper. and Observ. &c. p. 237.) He often observed that, when stomachic disorder, with febrile symptoms, was present, or when influenced by violent mental emotions, the villous coat of the stomach became red, irritable, and dry; and that but little gastric juice was secreted on the food being taken, digestion being very much prolonged. No more wine, therefore, nor more of any other fermented liquor, should be taken, than may be found sufficient to support the strength and ameliorate the symptoms of the dyspeptic, without quickening the circulation.

19. a. As a general rule, the desire for fluids is the chief indication of the time at which they ought to be taken; but large draughts should be avoided, as the stomach becomes suddenly distended, the juices diluted, and the muscular coat weakened by them. Besides, much more fluid may be thus taken than is necessary for the wants of the system. The dyspeptic ought never to drink largely, either during, or soon after, a meal. Frequent sipping, or drinking by mouthfuls, will be much more beneficial, and ultimately, more quenching of thirst. Mild drinks are best taken about three or four hours after a solid meal. It is then that tea and coffee are used as beverages. These are always injurious when made too strong, or taken in large quantity, especially to the dyspeptic. Soda water drank at the time of dinner is hurtful, by distending and over-exciting the stomach. Seltzer water is less so; but it is often of service some time after a meal, when there is much thirst. Soda water is then sometimes also of use.

20. b. The temperature at which fluids should be taken is of the utmost importance to dyspeptics and others labouring under the complaints enumerated above (§§ 1, 2. 7.). Extremes of temperature are injurious even to the healthy, and not only to the stomach, but also to the surrounding viscera, and to the teeth. The bad effects of the ingestion of large quantities of cold water into the stomach have been often demonstrated; but the subject has been very superficially considered. Dr. BEAU-MONT remarked, that a gill of water, at the tem-

perature of 55°, received into ST. MARTIN's stomach when empty, reduced the heat of the organ from 99° to 70°, at which it stood for a few minutes, and then rose very slowly. This experiment explains the injurious effects produced upon weak stomachs by cold fluids taken during digestion, and the fatal effects of very copious draughts of cold water whilst the body is fatigued and perspiring; the shoek which the constitution receives from having the temperature of the most vital and central organ suddenly and remarkably depressed, paralysing the other vital movements. It having been proved, that a temperature of 98° is requisite to healthy digestion, it must follow, that the use of ices, and particularly ieed ereams after dinner, or when digestion is proceeding, will be most injurious even to healthy persons. A fit of indigestion is often caused by them; and they seldom fail of lowering the vital tone of the stomach during the digestive process. The moderate use, however, of cold or iced water, or of water ices, when this process is completed, and when there is no exhaustion or disorder to forbid it, is beneficial, by inducing a salutary reaction in the organ. Ices can be only taken slowly, and in small quantities at a time; hence

#### THE CONDITIONS PROMOTING DIGESTION. 33

they produce a much less sudden fall of temperature of the stomach than draughts of cold fluids. Dr. DUNGLISON states, that labourers in Virginia were frequently killed by drinking copiously of spring water when over-heated; but that such accidents have rarely occurred since they have been supplied with ice. The proper temperature at which soups, tea, coffee, chocolate, &c. should be taken, may be stated at about 100°; and at this grade of heat, liquids will be found more quenching to thirst than at a higher or lower temperature.

# F. Of the Conditions necessary to promote healthy Digestion and Assimilation.

21. The determination of the circulating fluids to the digestive mucous surface and allied viscera, and the copious secretion from these viscera during digestion, require that the function should not be disturbed by moral or physical perturbation or exertion. Rest of body and tranquillity of mind for a short time before and after, but particularly after eating, is hence conducive to digestion.

#### THE CONDITIONS

Whatever solicits the nervous energy and the circulating fluids from the digestive viscera, or causes oppression of these viscera by over-loading the large veins, is also injurious during digestion. Hence blood-letting, hot or cold bathing, mental shocks, exertions of any kind, and other circumstances which operate in this way, are more or less hurtful. As the quantity of gastric juice requisite to the digestion of a full meal is generally secreted within an hour or an hour and a half after it is taken, or at least within two hours, even in the dyspeptic, bodily and mental repose is beneficial during this time. It is thus that a siesta after dinner is found so serviceable to the dyspeptic. But, by promoting digestion, it favours supply, diminishes waste, and consequently induces vascular plethora, and the usual consequences of this state, particularly in respect of the brain and liver. In dyspepsia, the desire for rest after a repast is great in proportion to the quantity eaten, the nervous energy being concentrated in the digestive viscera, in order to dispose of the ingesta. The state of the mind has a powerful influence on digestion : hilarity and ease of mind promote this function; whilst care, anxiety, envy, and dissatis-

34

faction, impede it. Dyspeptic complaints commence perhaps as often in the brain as in the stomach. They affect most frequently the studious, the scheming, the daring adventurer, the stockjobber, and the speculator, and all those who, by over-exerting their brains, thereby injure them.

#### ii. Of diet and regimen with reference 10 different states of indigestion.

# A. During States of Indigestion depending chiefly upon general Debility, or upon local Weakness of the Digestive Organs.

22. During these states of indigestion, the quantity of food should be reduced to the power of disposing of it; such articles as are difficult of digestion and irritate or weaken the stomach being altogether withdrawn.—a. The patient should be confined to a spare diet of animal food, and to a restricted use of fluids. A bulky meal ought always to be avoided; and when the appetite is impaired, abstinence will be frequently preferable to the use of stomachics. When the appetite does not fail, which is often the case when dyspepsia is produced by mental exertion, the patient should cease eating before the appetite is altogether allayed. The tea or coffee at breakfast should be taken with very little milk and sugar, and very little butter ought to be used. An egg,

fightly boiled, may be eaten by those who take sufficient exercise. The dinner should consist of lean animal food, particularly mutton, poultry, game, and venison, which ought to be roasted or broiled. Bulky vegetables should be avoided; but mealy potatoes, yams, or rice, mixed with the gravy of the meat, young summer turnips, cauliflower, or French beans, may be taken sparingly. The least hurtful fruits are strawberries, morel cherries, and mulberries; but they should be eaten as a part of the luncheon, rather than after dinner. Fluids, even when there is thirst, should be taken slowly, and in small quantity, and always after a meal. If the digestion or habit require the stimulus of wine, old sherry or old port, with an equal part of water, should be preferred; but the quantity of either or of both should not exceed two or three glasses. Twice-dressed meat, rechauffées, and made dishes, ought not to be eaten; and the food should be masticated slowly and thoroughly.

23. b. The kinds of food most injurious in this variety of dyspepsia, and therefore to be avoided, are sweet, mucilaginous, or acid fluids, and such as contain much milk; heavy puddings, compound dishes, and meat or other pies; new bread, or heavy unfermented bread; compact or fat dumplings, and

pultaceousartieles; ereams, eurds, eustards, eheese, and all preparations of milk; fat meat, partieularly pork or bacon, young meat, all gelatinous parts of meat, and salted or smoked meat; the less digestible species of fish, and all shell-fish; strong broths, gelatinous soups, or eoneentrated dishes; melted butter, oil, sauces, spices, condiments, and pickles; bulky or flatulent vegetables, especially cabbages, waxy potatoes; pot-herbs, beans, peas, cucumbers, &c.; most fruits, whether fresh or preserved; currants, gooseberries, apples, plums, melons, all kinds of nuts or kernels, and preserves or jellies. Malt liquors, particularly ale, perry, eider, home-made wines, punch, and shrub, should also be avoided.

24. c. Regular exercise ought to be taken in the open air; and the kinds of exercise that bring the greatest number of muscles into moderate action should be preferred. CELSUS very justly advises persons subject to stomach complaints, to exercise the upper extremities and parts of the body. There are several amusements which have this effect, especially billiards, feneing, rowing, cricket, &e. For females, singing, daneing, skipping, battledore, dumb-bells, and the exercises recommended by Mr. D. WALKER, will be found very serviceable, especially when confined to the house by weather, or when exercise on horseback or on foot cannot be taken.

B. Of the Diet and Regimen for States of Indigestion depending upon Irritation, or inflammatory Action in the Stomach, or in any of the associated Viscera.

25. The diet and regimen most suited for these states of indigestion differ considerably from what has been just recommended. In these varieties, bland, farinaceous, and semi-fluid food, in small or moderate quantity, is the most appropriate, until vascular disorder of the villous coat of the stomach or of the associated viscera is removed by treatment. Saccharine, farinaceous, feculent, mucilaginous, and acidulous articles of food are most easily digested in these conditions of the digestive organs. Gentle exercise, as gestation in a carriage or on horseback, sailing, swinging, and walking, is preferable to the more exciting kinds of exercise. After digestion is completed, tepid or warm bathing, and frictions of the surface, are generally beneficial. When vascular excitement is removed, the patient may gradually adopt the diet advised for

the preceding variety, beginning with light chicken, mutton, or veal broth, with toast or rice; and afterwards the more digestible kinds of solid food may be used. In these, as well as in the foregoing varieties of indigestion, the *conditions* described above (§ 21.) as necessary to promote healthy digestion and assimilation ought to be observed.

### C. Of the Beverages and Wines best suited for Indigestion.

26. The wines best suited for indigestion are old sherry or port diluted with equal parts of water, the finer kinds of elaret, hock, white hermitage, and Sauterne; but these should not be taken in the irritative and inflammatory forms of dyspepsia until vascular excitement of the villous coat of the stomach or of the allied organs is removed. The *beverages* and diluents most beneficial are seltzer water with a small quantity of hock, or seltzer water with milk or whey, or lime-water with milk or black tea, according to the peculiarities of the case. In the more irritable states of the stomach, whey, goat's whey, small quantities of seltzer water, or the imperial drink, should be preferred. When the state of the urine indicates the impropriety of using vegetable or mineral acids, the alkaline carbonates may be substituted for these acids, and be taken in a small quantity of soda water; or the aërated or effervescing magnesian water may be preferred. When indigestion has induced a torpid or disordered state of the biliary organs, not connected with inflammation, water slightly acidulated with the nitro-hydrochloric acids will be found serviceable.

# D. Of certain Mineral Waters for Disorders of the Digestive Organs.

27. Several mineral waters, both natural and factitious, are most excellent aids in the treatment of the several forms of indigestion.—a. In the varieties of indigestion depending chiefly upon general or local debility (§ 22.) the mineral springs of Clifton, Malvern, Bath, and Tunbridge Wells, and the carbonated chalybeate waters of Spa, Pyrmont, Carlsbad, Marienbad, Swalbach, and Eger, on the Continent; or their imitations prepared by Dr. STRUVE, are generally beneficial.

28. b. In the states of indigestion arising chiefly

from irritation or inflammatory action of the villous surface of the stomach, or of the allied organs (§ 25.), the springs of Harrowgate, of Ems, Plombières, Viehy, and of Marienbad, or other alkaline mineral waters, will be used with advantage. When the functions of the liver are disordered, the waters of Cheltenham or Leamington, or of the Beulah Spa, and the springs of Seidschutz and Pullna may be preferred; but when excitement of the villous coat of the stomach is removed, and when the functions of the exercting viscera are restored, the aërated ehalybeate waters, already mentioned, will be most serviceable.

THE END.

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